

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND the claims in accordance with the following:

1. (currently amended) A computer system performing real-time management of object-oriented system objects as job objects among groups of workers as worker groups in communication with each other via networked computers, said computer system comprising:

a form generator generating job definition forms, each job definition form defines worker groups and resources, said resources including job objects, available to the worker groups, to process, based upon job procedures, the objects of the object-oriented system as the job objects according to job-object conditions;

a resource manager managing the job-object conditions, including rights to use resources, worker group by worker group in real-time based upon the worker groups and resources defined in the job definition form;

a scheduler establishing the job-object conditions and scheduling each worker group to process the job objects, according to each worker group job procedure and the resources available to each worker group defined in the job definition form; and

a job monitor performing real-time monitoring of job processing by the worker groups based upon the procedure of each worker group in the job definition form and performing real-time controlling of sharing of the resources, including the job-objects, among the worker groups while maintaining security of the job objects according to the job-object conditions managed by the resource manager group by group and/or member by member thereof, thereby for a first worker group or a member thereof inhibiting access to the job objects thereof from another worker group or a member thereof to which permission to use the job objects of the first worker group or the member thereof is not allocated.

2. (PREVIOUSLY PRESENTED) The system according to claim 1, wherein said

resource manager, job monitor, and scheduler exchange rights to use the job objects among the worker groups.

3. (PREVIOUSLY PRESENTED) The system according to claim 1, further comprising a rearranging unit that manages worker rearrangements among the worker groups and manages the job-object conditions of the rearranged worker groups according to progress of the jobs from the job monitor, wherein said job monitor monitors the job processing and the job objects of the worker groups according to information from said rearranging unit.

4. (PREVIOUSLY PRESENTED) The system according to claim 1, wherein:
an emergency group is allowed to access every job object of every worker group; and
said job monitor accepts any request from the emergency worker group for accessing a job object.

5. (PREVIOUSLY PRESENTED) The system according to claim 1, wherein said job monitor performs at least one of transferring a job object from one of the worker groups to another worker group and automatically changing the job objects of any one of the worker groups according to a procedure.

6. (PREVIOUSLY PRESENTED) The system according to claim 1, wherein the job definition forms define group permission information, the system further comprising a requesting unit that, when a first group makes a request to use a job object of a second group, uses the group permission information to contact the second group for permission to use the job object.

7. (PREVIOUSLY PRESENTED) The system according to claim 6, wherein said request unit uses one of a telephone and a pager to request the second worker group for permission to use the job object.

8. (PREVIOUSLY PRESENTED) The system according to claim 6, wherein said request unit uses one of a telephone, a notebook computer, an electronic notepad, and a workstation through one of a wide-area network, a personal computer communication network, and a wireless network to request the second worker group for permission to use the job object.

9. (PREVIOUSLY PRESENTED) The system according to claim 6, further

comprising a visual I/O unit and an audio I/O unit to request the second worker group for permission to use the job object.

10. (PREVIOUSLY PRESENTED) The system according to claim 6, further comprising:

an input device, attached to a selected member of the second worker group, for identifying and locating the member; and

a positioning unit generating an image of the selected member, said input unit and positioning unit being used to directly request the member of the second worker group for permission to use the job object.

11. (PREVIOUSLY PRESENTED) The system according to claim 6, wherein said job monitor holds the schedules of the jobs of the worker groups and exchanges the jobs among the worker groups.

12. (PREVIOUSLY PRESENTED) The system according to claim 6, wherein said job monitor limits location, period, and each worker group to handle a job object, to thereby strictly maintain the security of the job object.

13. (PREVIOUSLY PRESENTED) The system according to claim 6, wherein said job monitor indicates whether permission for use of the job object is to be granted upon approval of all or some of the members of the second worker group.

14. (PREVIOUSLY PRESENTED) The system according to claim 6, wherein said job monitor adds a name of a worker group to which a job object belongs to a name of the job object, whereby plural job objects having the same name can be allocated to the worker group.

15. (PREVIOUSLY PRESENTED) The system according to claim 6, wherein said job monitor allocates a representative name to a set of job objects and identically handles the job objects under the representative name.

16. (PREVIOUSLY PRESENTED) The system according to claim 10, wherein said input device is a virtual-reality device attached to the selected member, to identify the location of the member.

17. (PREVIOUSLY PRESENTED) The system according to claim 10, wherein said input device is a head-mount display worn by the selected member so that the member may give permission to use the job object.

18. (PREVIOUSLY PRESENTED) The system according to claim 10, wherein said input device is provided with at least one of a password and an ID, to prevent illegal access to said input device.

19. (ORIGINAL) The system according to claim 9, wherein:
said visual I/O unit is a television camera; and
said audio I/O unit is a microphone.

20. (ORIGINAL) The system according to claim 10, wherein:
said input unit is one of a sensor and a transmitter; and
said positioning unit is a television camera.

21. (currently amended) A method of performing real-time groupwise management of object-oriented system objects as job objects, comprising:

- storing groups of workers as worker groups;
- generating job definition forms, each job definition form defines worker groups and resources, said resources including job objects, available to the worker groups, to process, based upon job procedures, the objects of the object-oriented system as the job objects according to job-object conditions;
- managing the job-object conditions, including rights to use resources, worker group by worker group in real-time based upon the worker groups and resources defined in the job definition form;
- establishing the job-object conditions according to the each worker group job procedure defined in the job definition form;
- scheduling each worker group to process the job objects, according to each worker group procedure and the resources available to each worker group defined in the job definition form;
- monitoring, in real-time, job processing by the worker groups based upon the procedure of each worker group in the job definition form; and

controlling, in real-time, sharing of the resources, including the job objects, among the worker groups while maintaining security of the job objects according to the managed job-object conditions group by group and/or member by member thereof by inhibiting access to a job object of a first worker group or a member thereof from another worker group or a member thereof to which permission to use the job object of the first worker group or the member thereof is not allocated.

22. (PREVIOUSLY PRESENTED) The method according to claim 21, further comprising setting as one of the job-object conditions rights to use the job objects among the worker groups processing the job objects.

23. (PREVIOUSLY PRESENTED) The method according to claim 28, wherein as the job object conditions, each job definition form identifies for each worker group, information indicating the rights to use the job objects, and at least one of a job period, worker group members, processes, the job objects allocated to the job carried out by the worker group, and permission information of the job objects.

24. (currently amended) A computer-readable medium encoded with a program performing real-time groupwise management of object-oriented system objects as job objects, comprising:

storing groups of workers as worker groups;

generating job definition forms, each job definition form defines worker groups and resources, said resources including job objects, available to the worker groups, to process, based upon job procedures, the objects of the object oriented system as the job objects according to job-object conditions;

managing the job-object conditions, including rights to use resources, worker group by worker group in real time based upon the worker groups and resources defined in the job definition form;

establishing the job-object conditions according to each worker group procedure defined in the job definition form;

scheduling each worker group to process the job objects, according to each worker group procedure and the resources available to each worker group defined in the job definition form;

monitoring, in real-time, job processing by the worker groups based upon the procedure

of each worker group in the job definition form; and

controlling, in real-time, sharing of the resources, including the job objects, among the worker groups while maintaining security of the job objects according to the managed job-object conditions group by group and/or member by member thereof by inhibiting access to a job object of a first worker group or a member thereof from another worker group or a member thereof to which permission to use the job object of the first worker group or the member thereof is not allocated.

25. (PREVIOUSLY PRESENTED) The computer readable medium of claim 24, the program further comprising a function of storing a job definition form defining for each group the jobs, the form indicating rights to use the resources, wherein the job definition form identifies for each job carried out by each group, as information indicating the rights to use the resources, at least one of a job period, group members, the resources allocated to the job to be carried out by the group, and permission information of the resources.

26. (currently amended) A computer system performing real-time management of object-oriented system objects as job objects among groups of workers as worker groups in communication with each other via networked computers, said computer system comprising:

a form generator generating job definition forms, each job definition form defines worker groups and resources, said resources including job objects, available to the worker groups, to process, based upon job procedures, the objects of the object-oriented system as the job objects according to job-object conditions;

a resource manager managing the job-object conditions, including rights to use resources, worker group by worker group in real-time based upon the worker groups and resources defined in the job definition form;

a scheduler establishing the job-object conditions and scheduling each worker group to process the job objects, according to each worker group job procedure and the resources available to each worker group defined in the job definition form; and

a job monitor performing real-time monitoring of job processing by the worker groups based upon the procedure of each worker group in the job definition form and performing real-time controlling of sharing of the resources, including the job-objects, among the worker groups while maintaining security of the job objects according to the job-object conditions managed by the resource manager group by group and/or member by member thereof, thereby for a first

worker group or a member thereof inhibiting access to the job objects thereof from another worker group or a member thereof to which permission to use the job objects of the first worker group or the member thereof is not allocated,

wherein as the job-object conditions, each job definition form identifies for each worker group, information indicating rights to use the job objects, and at least one of a job period, worker group members, the job objects allocated to the job to be carried out by the worker group, and the permission information of the job objects, and

wherein said resource manager, job monitor, and scheduler exchange rights to use the job objects among the worker groups, based upon the job-object conditions of each worker group defined in the job definition form.

27. (currently amended) A computer system performing real-time management of object-oriented system objects as job objects among groups of workers as worker groups in communication with each other via networked computers, said computer system comprising:

a job object manager to store a job definition form that defines one or more groups of workers and resources, said resources including job objects, available to the worker groups, to process based upon a job procedure for each group a specified job object, to assign the specified job object to the groups of workers, to store permission information for the specified job object, and to determine group by group and/or member by member thereof whether the specified job object is available to a first worker group based on the permission assignment information; and

a job monitor to receive from said job object manager information indicating whether the specified job object is available to the first worker group or a member thereof, and to request permission for the first worker group or the member thereof to access the specified job object from a second worker group or a member thereof to which the job object is assigned, using the permission information of the specified job object, when the received information indicates the specified job object is not available to the second worker group or the member thereof.

28. (currently amended) A computer system performing real-time management of object-oriented system objects as job objects among groups of workers as worker groups in communication with each other through network clients, said computer system comprising:

a file storage to store files of job objects and to store permission information for the job objects, whereby groups of workers can access the job objects through the network clients; and
a server coupled by the network to said file storage and to the clients, said server

generating job definition forms, each job definition form defining worker groups and resources, said resources including job objects, available to the worker groups, to process based upon a job procedure for each group a job object, allocating a corresponding job object to one or more of the worker groups, determining group by group and/or member by member thereof whether the job object is available to a requesting worker group or a member thereof based on the allocation information, and selectively changing the allocation information by using the permission information when a job requires access to the job object.